

## \* HISTORY \*

DATE :	25JAN01	DATA TECH :	SDA	ORGN SYMBOL :	LGMPM	PR NR :		APPLICATION:	T-38	PAGE	1	OF	1
CAGE:	0A1K8	MANUFACTURER NAME:		REFERENCE NR:		NOUN :		NSN :					
		MICHELIN TIRE CO.		20X4.4 R12		TIRE,PNEUMATIC		2620013211049					

[illegible]

## STANDARD ENGINEERING TEXT

ALL GOVERNMENT/MILITARY SPECIFICATIONS AND STANDARDS WILL NOT BE FURNISHED.  
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ENGINEERING DATA LIST REMARKS

FURNISHED METHOD CODE LEGEND:

C - CLASSIFIED DOCUMENT.	X - DATA SUPPLIED (NOT IN EDCARS).	G - GOV'T DOCUMENT.
S - FURNISHED WITH SOLICITATION.	R - FURNISHED BY PCD UPON REQUEST.	O - OTHERS, CONTRACTOR MUST ACQUIRE.
M - STABLE BASE DRAWING REQUIRED;	P - PARTIAL DOCUMENT FURNISHED.	
FURNISHED WITH CONTRACT AWARD.	V - VENDOR DRAWING;	A - DATA NOT AVAILABLE
	(NOT PROVIDED)	



SPECIAL PACKAGING INSTRUCTION			CODE ID 98747	SPI NO. (TPD) F01-157-3821 SHEET 1 OF 12									
PART OR DRAWING NO. MTL15041	NATIONAL STOCK NO. SEE TABLE	CURRENT REV A	ILL. C. CHARBONNEAU	CHK. K.W. OLSON									
ITEM NOMENCLATURE TIRES, PNEUMATIC		ORIGINAL DATE 99109	CNDR. M. STEPHENS	AUTH. A. BRIMHALL									
MILITARY PRESERVATION IAW MIL-STD-2073		PACKING AS SPECIFIED BELOW AND BILL OF MATERIALS											
SERVICEABLE METHOD: 10		LEVEL SPEC. STYLE TYPE CL VRIY GR IR											
UNSERVICEABLE METHOD: 10		A SEE TABLE I AND II											
QUP 001		B MIL-HDBK-774											
ICQ 000		LEVEL A LEVEL B											
CLEANING & DRYING IAW MIL-STD 2073		GROSS CU FT VARIES VARIES											
PRESERVATIVE: N/A		GROSS WT LBS VARIES VARIES											
MARKING IAW MIL-STD 129		DESIGN FRAGILITY G 110 110											
SPECIAL MARKINGS:		LENGTH WIDTH DEPTH											
A) SPI NO. F01-157-3821		CNTR I.D. SEE TABLE I & II & INSTRUCTIONS											
1. MARK THE SPI NUMBER ON THE LABEL SIDE OF THE CONTAINER.		CNTR O.D.											
2. MARK ALL REMOVABLE LINERS WITH THE SPI NUMBER.		LEVEL A: SEE TABLE I AND II											
3. MARK REUSEABLE CONTAINER ON ONE SIDE.		LEVEL B: 48 40 35											
CLOSURE		ITEM DIM SEE TABLE I											
LEVEL A: IAW PPP-B-621 UNNAILED CLOSURE OR		ITEM WT. SEE TABLE I											
IAW ASTM D6251 UNNAILED CLOSURE													
AS APPLICABLE.													
LEVEL B: IAW MIL HDBK-774													
<table border="1"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th>LR</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>A</td> <td>ADDED ATTACHMENT III, ADDED WOOD STATEMENT AND UPGRADE SPEC</td> <td>02085</td> </tr> </tbody> </table>					REVISIONS			LR	DESCRIPTION	DATE	A	ADDED ATTACHMENT III, ADDED WOOD STATEMENT AND UPGRADE SPEC	02085
REVISIONS													
LR	DESCRIPTION	DATE											
A	ADDED ATTACHMENT III, ADDED WOOD STATEMENT AND UPGRADE SPEC	02085											
-12	A/R SKIDS (LEVEL A ONLY)	4 X 4 (NOM) X A/R	ASTM-D6199 CLASS 2										
-11	A/R TAPE	3 X A/R	ASTM-D5486 TYPE I OR V										
-10	A/R TAPE	1 X A/R	ASTM-D5330 TYPE I										
-9	2 EDGE CLEATS (LEVEL A ONLY)	A/R	ASTM-D6199 CLASS 2										
-8	3 CLIPS, STEEL (LEVEL A ONLY)	3/4	ASTM-D3953 TY RD, FIN A										
-7	3 BANDS, STEEL (LEVEL A ONLY)	3/4 X A/R	ASTM-D3953 TY RD, FIN A										
-6	2 LINERS (ENDS)	A/R	ASTM-D4727 TY CF, CL DOM, VAR SW, GR 200										
-5	2 LINERS (SIDES)	A/R	ASTM-D4727 TY CF, CL DOM, VAR SW, GR 200										
-4	2 LINERS (TOP & BOTTOM)	A/R	ASTM-D4727 TY CF, CL DOM, VAR SW, GR 200										
-3	2 SHRINK WRAP	A/R	A-A-3174 TY IV, CL 1, GR A, FIN 1										
-2	2 TOP & BOTTOM SHLLT	48 X 40 X 1/8	ASTM-D4727 TY CF, CL DOM, VAR SW, GR 200										
-1	1 PALLET WOOD (LEVEL B ONLY)	48 X 40 X 5	NN P-71 TY IV OR V										
P/N	QTY REQD	NOMENCLATURE DESCRIPTION	SIZE (INCHES UNLESS SPECIFIED)	MATERIAL SPECIFICATION									

DD FORM 2169 MFD

COMPUTER GENERATED

SPI NO F01-157-3821

SPECIAL PACKAGING INSTRUCTION	CODE ID 98747	SPI NO. (TPD) F01-157-3821
ITEM NOMENCLATURE TIRES, PNEUMATIC	SHEET 2 OF 12	
<p><b>NOTICES</b></p> <p>NOTICE 1: IF THE TIRES MUST BE SHIPPED (MOUNTED) ON THE WHEELS, REFER TO TIRE/WHEEL ASSEMBLY (SPECIAL CONDITIONS AUTHORIZATION) PACKAGING INSTRUCTIONS ON ATTACHMENT III OF THIS SPI.</p> <p>NOTICE 2: NORMAL OPERATIONAL TEAR-DOWN OF MATED TIRE AND WHEEL ASSEMBLIES IS STILL REQUIRED AT CONUS/OCONUS MAIN OPERATING BASES (MOB) THAT ARE TIRE AND WHEEL SHOP CAPABLE IN ACCORDANCE WITH APPLICABLE TECHNICAL ORDER DATA, PRIOR TO SHIPPING TO DEPOT.</p> <p>NOTICE 3: TIRES AND WHEELS ARE STOCK LISTED INDIVIDUALLY AND ARE TO BE SHIPPED SEPARATELY. IF THE TIRES MUST BE SHIPPED MOUNTED ON THE WHEELS, REFER TO SPECIAL CONDITIONS AUTHORIZATION ATTACHMENT III.</p> <p>NOTICE 4: ATTACHMENT I IS HANDLING INSTRUCTIONS FOR EVERYONE EXCEPT MANUFACTURERS.</p> <p>NOTICE 5: ATTACHMENT II IS HANDLING INSTRUCTIONS FOR MANUFACTURERS.</p> <p>NOTICE 6: ATTACHMENT III IS SPECIAL CONDITIONS AUTHORIZATION.</p> <p><b>EUROPEAN UNION (EU) REQUIREMENTS NOTICES</b></p> <p>NOTICE 7: LUMBER AND PACKAGING/CONTAINER STATEMENT - "ALL WOODEN LUMBER AND WOOD CONTAINERS PRODUCED ENTIRELY OR IN PART OF NON-MANUFACTURED SOFTWOOD SPECIES SHALL BE CONSTRUCTED FROM HEAT TREATED (HT) MATERIAL (HT TO 56 DEGREES CENTIGRADE OR 133 DEGREES FAHRENHEIT FOR 30 MINUTES). CERTIFICATION IS REQUIRED BY AN ACCREDITED AGENCY RECOGNIZED BY THE AMERICAN LUMBER STANDARDS COMMITTEE (ALSC). CONSTRUCTION AND CERTIFICATION SHALL BE IN ACCORDANCE WITH NON-MANUFACTURED WOOD PACKING POLICY AND NON-MANUFACTURED WOOD PACKING ENFORCEMENT REGULATIONS, BOTH DATED MAY 30, 2001." THESE DOCUMENTS CAN BE FOUND AT <a href="http://WWW.APHIS.USDA.GOV">WWW.APHIS.USDA.GOV</a>.</p> <p>NOTICE 8: WOODEN PALLET STATEMENT - "ALL WOODEN PALLETS PRODUCED ENTIRELY OR IN PART OF NON-MANUFACTURED SOFTWOOD SPECIES SHALL BE CONSTRUCTED FROM HEAT TREATED (HT) MATERIAL (HT TO 56 DEGREES CENTIGRADE OR 133 DEGREES FAHRENHEIT FOR 30 MINUTES). CERTIFICATION IS REQUIRED BY AN ACCREDITED AGENCY RECOGNIZED BY THE AMERICAN LUMBER STANDARDS COMMITTEE (ALSC). CONSTRUCTION AND CERTIFICATION SHALL BE IN ACCORDANCE WITH NON-MANUFACTURED WOOD PACKING POLICY AND NON-MANUFACTURED WOOD PACKING ENFORCEMENT REGULATIONS, BOTH DATED MAY 30, 2001." THESE DOCUMENTS CAN BE FOUND AT <a href="http://WWW.APHIS.USDA.GOV">WWW.APHIS.USDA.GOV</a>.</p> <p>NOTICE 9: HARDWOOD SPECIES STATEMENT - "ALL WOODEN PALLETS PRODUCED ENTIRELY OF NON-MANUFACTURED HARDWOOD SPECIES SHALL BE IDENTIFIED BY A PERMANENT MARKING OF "NC" (NON-CONIFEROUS), 1.25 INCHES OR GREATER IN HEIGHT, ACCOMPANIED BY THE CAGE CODE OF THE CONTRACTED MANUFACTURER AND THE MONTH AND YEAR OF THE CONTRACT. ON PALLETS, THE MARKING SHALL BE APPLIED TO THE STRINGER OR BLOCK ON OPPOSITE SIDES AND ENDS OF THE PALLET AND BE CONTRASTING AND CLEARLY VISIBLE."</p> <p><b>NOTES</b></p> <ol style="list-style-type: none"> <li>1. READ ALL SPI INSTRUCTIONS THOROUGHLY PRIOR TO DETERMINING HOW TIRES ARE TO BE SHIPPED.</li> <li>2. TIRES, WEIGHT AND SIZES ARE SHOWN IN TABLE I AND II. PACKAGING FOR LEVEL A IS SHOWN IN TABLE II.</li> <li>3. PACKAGING FOR LEVEL B IS SHOWN IN FIGURE 1. WEIGHTS AND SIZES VARY DEPENDING ON QUANTITY OF TIRES SHRINK WRAPPED. LEVEL B MAXIMUM PACKAGING DIMENSION IS 48 X 40 X 55.</li> <li>4. ITEMS PACKED IN PREVIOUS SPI'S DO NOT REQUIRE REPACKING UNLESS THEY DO NOT PROTECT THE TIRES.</li> <li>5. THIS SPI DOES NOT LIST EVERY NSN THAT MAY APPLY, AS TIRES ARE IDENTIFIED THAT ARE BETWEEN 1 TO 20 INCH DIAMETERS THIS SPI MAY BE USED. CONTACT THE PRIME ALC OF ANY NEW NSN AND THEY WILL BE ADDED WHEN REVISIONS ARE MADE.</li> </ol>		

### SPECIAL PACKAGING INSTRUCTION

CODE ID  
98/47

SPI NU. (TPN)  
F01-15/-3821

ITEM NUMENCLATURE  
TIRFS, PNEUMATIC

SHEET 3 OF 12

TABLE I  
FOR QUP OF 1

PACKING	LEVEL	SPEC	STYLE	TYPE	CLASS	VARIETY	GRADE
	A	55P-3-62 (MOD)	3	2			4

[illegible]

SPI Nil. (TPU)  
F01-157-3821

SHEET 4 OF 12

### SKIDS WHEN REQUIRED BY SPECIFICATION

PACKING	LEVEL	SPEC	STYLE	TYPE	CLASS	VARIETY	GRADE
	A	ASTM-I625; (NDD)	A	0			A

[illegible]

SPECIAL PACKAGING INSTRUCTION	CODE ID	SPI NO. (TPU)
	98747	F01-157-3821
ITEM NOMENCLATURE		SHEET 5 OF 12
TIRES, PNEUMATIC		

**ATTACHMENT I**  
**PACKING AND HANDLING INSTRUCTIONS**  
**FOR AIRCRAFT TIRES**  
**FOR EVERYONE EXCEPT THE MANUFACTURER**

AIRCRAFT TIRES ARE EASILY DAMAGED AND THEY REQUIRE SPECIAL MARKING AND HANDLING. THESE INSTRUCTIONS APPLY TO ALL AIRCRAFT TIRES. THEY INCLUDE NEW, RECAPPED, AS WELL AS RECAPPABLE TIRES. DOD ACTIVITY, OR PERSONS RESPONSIBLE FOR THE SHIPMENT, HANDLING, OR STORAGE OF THESE TIRES WILL COMPLY WITH THESE INSTRUCTIONS. IF ANY DEVIATION IS REQUIRED FROM THESE INSTRUCTIONS A WAIVER MUST BE OBTAIN FROM THE RESPONSIBLE PACKAGING OFFICE. THESE INSTRUCTIONS CAN BE OBTAINED FROM THE RESPONSIBLE PACKAGING OFFICE AND WILL BE ASSIGNED IN THE FORM OF A WAIVER AND WILL HAVE A NUMBER THAT WILL BE MARKED ON THE SHIPMENT.

1. WHEN POSSIBLE TIRES WILL BE PACKED, SHIPPED OR STORED IN A VERTICAL POSITION (ON THE TREAD). TIRES MAY BE SHIPPED HORIZONTAL (ON SIDEWALLS) WITH THESE PROVISIONS. WHEN TIRES ARE SHIPPED HORIZONTALLY, BY A METHOD CALLED STOVE-PIPING THE TOTAL STACKING HEIGHT MUST BE LIMITED TO 84 INCHES, OR SEVEN FEET TO INSURE THEY ARE NOT CRUSHED FROM THE STACKING WEIGHT. THIS MAXIMUM STACKING HEIGHT IS A LIMIT AND IS TO BE USED AS SUCH. TIRES 40 INCHES DIAMETER AND LARGER MAY BE DAMAGED IF SHIPPED HORIZONTAL. THE SHIPPER MUST INSURE TIRES ARE NOT SHIPPED HORIZONTAL IF THEY WILL BE DAMAGED. TIRES THAT ARE TO HEAVY TO STACK TO 84 INCHES MUST NOT BE STACKED ANY HIGHER, THIS WILL INSURE THEY ARE NOT CRUSHED. IT IS THE SHIPPERS RESPONSIBILITY TO INSURE TIRES ARE NOT CRUSHED FROM THE STACKING WEIGHT. THE SHIPPER IS RESPONSIBLE TO INSURE SHIPPING SURFACES ARE FREE FROM ANYTHING THAT COULD DAMAGE THE TIRES SIDEWALLS, E.G. NAILS, WOOD-SLIVERS ETC. AIRCRAFT TIRES MAY BE SHRINK WRAPPED TO A PALLET WITH THE FOLLOWING REQUIREMENTS. STACKING HEIGHT IS LIMITED TO 55 INCHES. THIS HEIGHT OF 55 INCHES INCLUDES THE PALLET USED. TIRE SIZE IS LIMITED TO PALLET SIZE. NO TIRES OVER 40 INCHES MAY BE WRAPPED OR SHIPPED ON A STANDARD 48 X 40 PALLET. TIRES MAY NOT HANG OVER THE EDGE OF A PALLET. THE USE OF A TOP AND BOTTOM SHEET OF FIBERBOARD IS MANDATORY. USE OF A TOP SHEET OF FIBERBOARD DURING WRAPPING WILL WATERPROOF THE PALLETIZED TIRES. THE BOTTOM SHEET PROTECTS THE TIRES FROM THE PALLET. PVC FILMS SHOULD NOT BE USED, AS THESE LOOSEN AT HIGH TEMPERATURES AND COULD AFFECT THE STABILITY OF TIRE STACKS. THIS MEETS MILITARY STANDARDS FOR SERVICEABLE AND UNSERVICEABLE METHODS OF PRESERVATION. PRIOR TO USE OF ANY PALLET IT MUST BE INSPECTED FOR ANY LOOSE NAILS OR WOOD THAT COULD CAUSE DAMAGE TO TIRES. UPON ARRIVAL AT THEIR DESTINATION, ALL AIRCRAFT TIRES MUST BE IMMEDIATELY UNWRAPPED AND STORED VERTICALLY (ON THEIR TREADS). THEREFORE, SHIPPING THESE TIRES ON THEIR SIDES IS ONLY A TEMPORARY ALLOWANCE. IF THE TIRES ARE TO BE RESHIPED WITHIN A SHORT PERIOD OF TIME, THEY MAY BE LEFT PALLETIZED. HOWEVER, THE SHIPPER, CARRIER AND RECEIVERS OF ALL TIRES ARE RESPONSIBLE TO INSURE THE TIRES ARE LEFT ON THEIR SIDES FOR THE SHORTEST TIME POSSIBLE. ANY DAMAGE WILL BE CHARGED TO THOSE IN POSSESSION OF THE TIRES AT THE TIME OF THE DAMAGE.

2. NOTHING THAT WILL LEAVE ADHESIVES ON THE TIRES MAY BE USED TO ATTACH LABELS OR MARKINGS. GLUES ARE ALMOST IMPOSSIBLE TO REMOVE FROM TIRES AND ARE UNDER NO CIRCUMSTANCE TO BE USED.

3. TIRES ARE EASILY DAMAGED BY ANYTHING SHARP OR PROTRUDING OBJECTS. PRIOR TO PUTTING TIRES IN ANY CONTAINER, TRUCK, TRAILER, OR RAIL CAR AND ON PALLETS ALL SURFACES WILL BE INSPECTED TO INSURE NOTHING WILL PUNCTURE OR DAMAGE THE TIRES. THIS INCLUDES, NAILS, WOOD SLIVERS, STAPLES ETC. WHEN SURFACES ARE IN SUCH CONDITION THAT THEY CAN CAUSE DAMAGE TO THE TIRES THEY MUST BE LINED TO PROTECT THE TIRES. DO NOT USE KNIVES, RAZORS OR ANYTHING SHARP TO PACK OR UNPACK TIRES. DO NOT SHIP TIRES NEXT TO, ON TOP OF, OR UNDER ANY MATERIAL THAT COULD CAUSE DAMAGE TO THE TIRE. PALLETS DESIGNED WITH STEEL POLES THAT SUPPORT THE WEIGHT OF THE PALLET ABOVE MAY BE STACKED. OTHERWISE, PALLETS MAY NOT BE STACKED. FORK EXTENSIONS WILL BE USED WHEN MOVING LARGE PALLETS OF TIRES.

SPECIAL PACKAGING INSTRUCTION	CODE ID 9874/	SPI NO. (TPO) F01-157-3821
ITEM NOMENCLATURE TIRES, PNEUMATIC	SHEET 6 OF 12	

## ATTACHMENT I - CONTINUED

4. THE TIRE BEAD IS ANOTHER AREA THAT IS EASILY DAMAGED. TIRES SHOULD NEVER BE LIFTED WITH THE FORKS OF A FORKLIFT UNLESS THAT FORKLIFT HAS SPECIAL FORKS DESIGNED TO LIFT TIRES. THE BEAD OF THE TIRE IS AN AREA WHERE THEY ARE SEALED AGAINST THE WHEEL. ANY FOREIGN MATERIAL SUCH AS GLUE, DIRT, OR GREASE CAN CAUSE THE TIRE NOT TO SEAL. ANY SCRATCHES OR DAMAGE TO THIS BEAD DESTROYS THE TIRE FOR USE. ALL HANDLING WILL INSURE THE BEAD AREA IS PROTECTED AT ALL TIMES.

5. ALL SHIPPING CONTAINERS MADE OF WOOD ARE TO BE LINED WITH ASTM-D4727, CORRUGATED FIBERBOARD (C.F.), DOMESTIC (DOM), SINGLE WALL (SW), GRADE (GR), 175 OR EQUAL. THE INSIDE DIMENSIONS OF SHIPPING CONTAINERS SHALL BE LIMITED TO ONE INCH LARGER THAN THE OVERALL LENGTH, WIDTH AND DEPTH OF THE COMBINED GROUP OF TIRES BEING SHIPPED. LENGTH SHALL NOT EXCEED 84 INCHES O.D. IF POSSIBLE AND HEIGHT SHALL NOT EXCEED 45 INCHES O.D. SKIDS SHOULD BE USED IF THE GROSS WEIGHT EXCEEDS 200 LBS, OR 100 LBS IF BOTH LENGTH AND WIDTH DIMENSIONS EXCEED 48 INCHES AND 24 INCHES RESPECTIVELY. LEVEL A SHIPPING CONTAINERS ARE NOT TO EXCEED 2500 LBS GROSS WEIGHT. CONTENTS ARE NOT TO EXCEED 1000 LBS.

6. MARKING OF TIRES CAN ONLY BE ACCOMPLISHED THROUGH THE USE OF ADHESIVE BACKED LABELS OR ENVELOPES THAT ARE APPLIED TO THE TREAD. ONE COPY OF THE APPLICABLE SPI SHOULD BE ATTACHED TO THE TIRE IN AN ADHESIVE BACKED ENVELOPE. IF DESIRED THE SPI MAY ACCOMPANY THE DOCUMENTATION. FOR SHIPMENTS OF MORE THAN ONE TIRE OF THE SAME SIZE, ONE SPI WILL BE ADEQUATE AND THIS SPI MUST ACCOMPANY THE PAPER WORK.

7. WHEN TIRES ARE UNIT PACKED IN QUANTITIES OF MORE THAN ONE, THEY SHALL BE SEPARATED BY CRAFT PAPER, UU-P-268, TYPE I, GRADE OPTIONAL OR PLASTIC FILM CONFORMING TO A-A-3174, TYPE I, CL 1, GR A, FIN 1 OR ANY MATERIAL THAT WILL SEPARATE THESE TIRES AND PREVENT DAMAGE.

8. WHEN LOADING OR STACKING TIRES WITH VARYING DIMENSION, SIZES 40 INCHES AND LARGER SHALL CONSTITUTE THE FIRST TIER. SUBSEQUENT LAYERS SHALL BE POSITIONED ACCORDING TO DIMENSIONS. WITH THE LARGEST ONES ON THE BOTTOM AND THE NEXT LARGEST SIZE ON TOP OF THEM IN ORDER. TOTAL HEIGHT OF TIERS SHALL NOT EXCEED SEVEN FEET. TIRES WILL NOT BE USED FOR CHALKING, SIDES AND DOORS OF RAIL CARS AND TRAILERS WILL BE LINED WITH FIBERBOARD CONFORMING TO ASTM-D4727 CF, DOM, SW, GR, 175 OR EQUAL. SLIP SHEETS WILL BE INSERTED BETWEEN TIERS AT LEAST TWICE IN THE LOAD FOR STABILIZATION AND TO HELP PREVENT SHIFTING.

9. CAUTION: WHEN WOOD CONTAINERS ARE USED DO NOT NAIL LIDS ON, THEY MUST BE UNNAILED CLOSURES.

10. WHEN SHIPPING ON AN OPEN TRAILER, CONTAINERS WILL BE COVERED WITH A TARP.

11. UNLESS OTHERWISE SPECIFIED, DIMENSIONS WILL BE IN INCHES, TOLERANCES: FRACTIONS: + OR  $\frac{1}{8}$  DECIMALS: + OR - .125

12. TIRES WILL BE PALLETIZED IN ACCORDANCE WITH MIL-STD-147.

13. ADHESIVE BACKED LABELS WILL BE USED ON THE SIDEWALL TO SHOW THE TIRES MUST BE STORED AND SHIPPED UPRIGHT AND THAT THEY ARE PRESSURE SENSITIVE. THESE LABELS ARE TO BE 4 INCHES BY 6 INCHES WITH  $\frac{1}{2}$  INCH LETTERING FOR TIRES LARGER THAN 36 INCHES. FOR TIRES SMALLER THAN 36 INCHES THE LABELS WILL BE 3 INCHES BY 5 INCHES WITH  $\frac{1}{4}$  INCH LETTERING.



SPECIAL PACKAGING INSTRUCTION	CODE ID 98747	SPI NO. (TPD) F01-157-3821
ITEM NOMENCLATURE TIRES, PNEUMATIC	SHEET 7 OF 12	

## ATTACHMENT II

### PACKING AND HANDLING INSTRUCTIONS FOR AIRCRAFT TIRES FROM THE MANUFACTURER TO THE BUYER

AIRCRAFT TIRES ARE EASILY DAMAGED AND THEY REQUIRE SPECIAL MARKING AND HANDLING. THESE INSTRUCTIONS APPLY TO ALL AIRCRAFT TIRES. THEY INCLUDE NEW, RECAPPED, AS WELL AS RECAPABLE TIRES. ANY MANUFACTURER RESPONSIBLE FOR THE SHIPMENT, HANDLING, OR STORAGE OF THESE TIRES WILL COMPLY WITH THESE INSTRUCTIONS. IF ANY DEVIATION IS REQUIRED FROM THESE INSTRUCTIONS A WAIVER MUST BE OBTAINED FROM THE RESPONSIBLE PACKAGING OFFICE.

1. TIRES NORMALLY WILL BE PACKED, SHIPPED OR STORED IN A VERTICAL POSITION (ON THE TREAD). TIRES MAY BE SHIPPED HORIZONTALLY (ON SIDEWALLS) WITH THESE PROVISIONS. WHEN TIRES ARE SHIPPED HORIZONTALLY, IN A METHOD CALL STOVE-PIPING THE TOTAL STACKING HEIGHT MUST BE LIMITED TO 84 INCHES, OR SEVEN FEET TO INSURE THEY ARE NOT CRUSHED FROM THE STACKING WEIGHT. THIS MAXIMUM STACKING HEIGHT IS A LIMIT AND IS TO BE USED AS SUCH. TIRES 40 INCHES DIAMETER AND LARGER MAY BE DAMAGED IF SHIPPED HORIZONTAL. THE SHIPPER MUST INSURE TIRES ARE NOT SHIPPED HORIZONTAL IF THEY WILL BE DAMAGED. TIRES THAT ARE TOO HEAVY TO STACK TO 84 INCHES MUST NOT BE STACKED ANY HIGHER THAN WILL INSURE THEY ARE NOT CRUSHED. IT IS THE SHIPPERS RESPONSIBILITY TO INSURE TIRES ARE NOT CRUSHED FROM THE STACKING WEIGHT. THE SHIPPER IS RESPONSIBLE TO INSURE SHIPPING SURFACES ARE FREE FROM ANYTHING THAT COULD DAMAGE THE TIRES SIDEWALLS, E.G. NAILS, WOOD-SLIVERS ETC. AIRCRAFT TIRES MAY BE SHRINK WRAPPED TO A PALLET WHICH WILL HAVE A COMBINED TOTAL OF 55 INCHES, TIRE HEIGHT PLUS PALLET HEIGHT. TIRE SIZE IS LIMITED TO PALLET SIZE. NO TIRES OVER 40 INCHES MAY BE SHRINK WRAPPED OR SHIPPED ON A STANDARD 48 X 40 PALLET. TIRES MAY NOT HANG OVER THE EDGE OF A PALLET. PVC FILMS SHOULD NOT BE USED, AS THESE LOOSEN AT HIGH TEMPERATURES AND COULD AFFECT THE STABILITY OF TIRE STACKS. SHRINK WRAP MEETS MILITARY STANDARDS FOR SERVICEABLE AND UNSERVICEABLE METHODS OF PRESERVATION. THE USE OF A TOP AND BOTTOM SHEET OF FIBERBOARD IS MANDATORY WHEN TIRES ARE SHRINK WRAPPED. USE OF A TOP SHEET OF FIBERBOARD IS MANDATORY WHEN TIRES ARE SHRINK WRAPPED. USE OF A TOP SHEET OF FIBERBOARD DURING WRAPPING WILL WATERPROOF THE PALLETIZED TIRES. THE BOTTOM SHEET PROTECTS THE TIRES FROM THE PALLET. PRIOR TO USE OF ANY PALLET IT MUST BE INSPECTED FOR ANY LOOSE NAILS OR WOOD THAT COULD CAUSE DAMAGE TO TIRES. UPON ARRIVAL AT THEIR DESTINATION, ALL AIRCRAFT TIRES MUST BE IMMEDIATELY UNWRAPPED AND STORED VERTICALLY (ON THEIR TREADS), UNLESS THEY ARE TO BE SHIPPED WITH IN A SHORT PERIOD OF TIME. SHIPPING THESE TIRES ON THEIR SIDES IS ONLY A TEMPORARY ALLOWANCE. THE SHIPPER, CARRIER AND RECEIVER OF ALL TIRES ARE RESPONSIBLE TO INSURE THE TIRES ARE LEFT ON THEIR SIDE FOR THE SHORTEST TIME POSSIBLE. ANY DAMAGE WILL BE CHARGED TO THOSE IN POSSESSION OF THE TIRES AT THE TIME OF THE DAMAGE.

2. NOTHING THAT WILL LEAVE ADHESIVES ON THE TIRES MAY BE USED TO ATTACH LABELS OR MARKINGS. GLUES ARE ALMOST IMPOSSIBLE TO REMOVE FROM TIRES AND ARE UNDER NO CIRCUMSTANCES TO BE USED.

3. TIRES ARE EASILY DAMAGED BY ANYTHING SHARP OR PROTRUDING OBJECTS. PRIOR TO PUTTING TIRES IN ANY CONTAINER, TRUCK, TRAILER, OR RAIL CAR AND ON PALLETS ALL SURFACES WILL BE INSPECTED TO INSURE NOTHING WILL PUNCTURE OR DAMAGE THE TIRES. THIS INCLUDES, NAILS, WOOD SLIVERS, STAPLES ETC. WHEN THE SURFACES ARE IN SUCH CONDITION THAT THEY CAN CAUSE DAMAGE TO THE TIRES THEY MUST BE LINED WITH A SUITABLE LINER TO PROTECT THE TIRES. DO NOT USE KNIVES, RAZORS OR ANY THING SHARP TO PACK OR UNPACK TIRES. DO NOT SHIP TIRES NEXT TO, ON TOP OF, OR UNDER ANY MATERIAL THAT COULD CAUSE DAMAGE TO THE TIRE. PALLETS DESIGNED WITH STEEL POLES THAT SUPPORT THE WEIGHT OF THE PALLET ABOVE MAY BE STACKED. OTHERWISE, PALLETS MAY NOT BE STACKED. FORK EXTENSIONS WILL BE USED WHEN MOVING LARGER PALLETS OF TIRES.

SPECIAL PACKAGING INSTRUCTION	CODE ID	SPI NO. (FPO)
	98747	701-157-3821
ITEM NOMENCLATURE		SHEET 8 OF 12
TIRES, PNEUMATIC		

**ATTACHMENT II - CONTINUED**

4. THE TIRE BEAD IS ANOTHER AREA THAT IS EASILY DAMAGED. TIRE SHOULD NEVER BE LIFTED WITH THE FORKS OF A FORKLIFT UNLESS THAT FORKLIFT HAS SPECIAL FORKS DESIGNED TO LIFT TIRES. THE BEAD OF THE TIRE IS AN AREA WHERE THEY ARE SEALED AGAINST THE WHEEL. ANY FOREIGN MATERIAL SUCH AS GLUE, DIRT OR GREASE CAN CAUSE THE TIRE NOT TO SEAL. ANY SCRATCHES OR DAMAGE TO THIS BEAD DESTROYS THE TIRE FOR USE. ALL HANDLING WILL INSURE THE BEAD AREA IS PROTECTED AT ALL TIMES.

5. MARKING OF TIRES CAN ONLY BE ACCOMPLISHED THROUGH THE USE OF ADHESIVE BACKED LABELS OR ADHESIVE BACKED ENVELOPES THAT ARE APPLIED TO THE TREAD. ONE COPY OF THE APPLICABLE SPI SHOULD BE ATTACHED TO THE TIRE IN AN ADHESIVE BACKED ENVELOPE, OR A COPY OF THESE INSTRUCTIONS. IN LIEU OF ATTACHING THE SPI OR HANDLING INSTRUCTIONS TO THE TIRE A COPY SENT WITH THE PAPER WORK WILL BE ADEQUATE. FOR MULTIPLE TIRE SHIPMENTS OF THE SAME TIRE ONE COPY OF THE SPI OR HANDLING INSTRUCTIONS WILL BE CONSIDERED ADEQUATE.

6. WHEN LOADING OR STACKING TIRES WITH VARYING DIMENSIONS, SIZES 40 INCHES AND LARGER SHALL CONSTITUTE THE FIRST TIER. SUBSEQUENT LAYERS SHALL BE POSITIONED ACCORDING TO DIMENSIONS. WITH THE LARGEST ONES ON THE BOTTOM AND THE NEXT LARGEST SIZE ON TOP OF THEM IN ORDER. TOTAL HEIGHT OF TIERS SHALL NOT EXCEED SEVEN FEET OR 84 INCHES. TIRES WILL NOT BE USED FOR CHALKING, SIDES AND DOORS OF RAIL CARS. SLIP SHEETS WILL BE USED BETWEEN TIERS AT LEAST TWICE IN THE LOAD FOR STABILIZATION AND TO HELP PREVENT SHIFTING.

7. **CAUTION:** WHEN WOOD CONTAINERS ARE USED DO NOT NAIL LIDS ON, THEY MUST BE UNNAILED CLOSURES.

8. WHEN SHIPPING ON AN OPEN TRAILER, CONTAINERS WILL BE COVERED WITH A TARP.

9. UNLESS OTHERWISE SPECIFIED, DIMENSIONS WILL BE IN INCHES, TOLERANCES:  
FRACTIONS: + OR -  $\frac{1}{8}$       DECIMALS: + OR - .125

## SPECIAL PACKAGING INSTRUCTION

CDDF ID  
9874/SPI NO. (TPD)  
F01-15/-3821ITEM NOMENCLATURE  
TIRES, PNEUMATIC

SHEET 9 OF 12

**ATTACHMENT III**  
**SPECIAL CONDITIONS AUTHORIZATION**

FIRST, THE SHIPPER AND PACKER MUST COMPLY WITH THE INSTRUCTIONS GIVEN IN ATTACHMENT I, PACKING AND HANDLING INSTRUCTIONS FOR AIRCRAFT TIRES, EXCEPT WHERE THIS SPECIAL CONDITIONS AUTHORIZATION GIVES DIFFERENT GUIDANCE. FOR EXAMPLE, YOU MAY NOT SHIP MORE THAN ONE TIRE AND WHEEL ASSEMBLY HORIZONTALLY OR YOU MAY NOT STACK TIRE AND WHEEL ASSEMBLIES.

UNDER NORMAL CONDITIONS AIRCRAFT TIRES AND WHEELS SHOULD NEVER BE SHIPPED TOGETHER. HOWEVER, THERE ARE SPECIAL CONDITIONS IN THE FIELD WHEN SHIPPING TIRES AND WHEELS AS AN ASSEMBLY IS NECESSARY TO ACCOMPLISH MISSION REQUIREMENTS. THIS AUTHORIZATION IS TO ACCOMMODATE THOSE MISSION ESSENTIAL NEEDS. WHEN WHEELS AND TIRES ARE ASSEMBLED IT IS RECOMMENDED THE TOTAL RATED PRESSURE BE REDUCED BY 15-20% (LEAVING 80-85%) OF THE MAXIMUM RATED PRESSURE. THIS REDUCTION IN TOTAL PRESSURE IS RECOMMENDED AND NOT MANDATORY. NEVER INFLATE TIRES OVER THE MAXIMUM RATED PRESSURE. WHEN SHIPPING TIRE AND WHEEL ASSEMBLIES THEY MUST BE SECURED AT ALL TIMES AND THE HAZARD OF BEING UNDER PRESSURE MUST BE IDENTIFIED. PROTECTIVE PROCEDURES TO BE USED WHEN SHIPPING AIRCRAFT TIRE AND WHEELS AS ASSEMBLIES ARE AS FOLLOWS:

1. SHIPPERS AND CARRIERS ARE RESPONSIBLE TO ENSURE TIRE AND WHEEL ASSEMBLIES ARE PROPERLY PREPARED AND PROTECTED FOR SHIPMENT. WHENEVER POSSIBLE, TIRE AND WHEEL ASSEMBLIES WILL BE PACKED, SHIPPED AND/OR STORED IN A VERTICAL POSITION (ON THE TREAD). WHEN SHIPPING TIRE AND WHEEL ASSEMBLIES VERTICALLY (ON THE TREAD) PLACE FIBERBOARD SEPARATORS BETWEEN EACH ASSEMBLY. THIS IS TO ELIMINATE ANY CHAFING AND DAMAGE THAT MAY BE CAUSED BY METAL TO METAL CONTACT OF THE WHEELS. IF THE WHEELS HAVE HEAT SHIELDS THAT EXTEND PAST THE EDGE OF THE WHEELS FIBERBOARD RELIEF PADS MUST BE USED TO INSURE THE HEAT SHIELDS ARE NOT CRUSHED. THE CONTAINER DESIGNED FOR TIRES ARE TO BE USED WITH THESE CHANGES: IF THE WHEELS ASSEMBLED WITH THE TIRES ARE TOO WIDE FOR THE CONTAINER, REDUCE THE QUANTITY BY ONE AND FILL THE VOID WITH A SUITABLE FILLER. THIS FILLER CAN BE A FALSE END THAT IS ADEQUATELY SUPPORTED. WHEEL AND TIRE ASSEMBLIES SHOULD NOT BE SHIPPED HORIZONTALLY, IF AT ALL POSSIBLE. IF YOU HAVE NO OTHER OPTION BUT TO SHIP THEM HORIZONTALLY THEY WILL NOT BE STACKED. YOU MUST SHIP ONLY ONE ASSEMBLY TO A CONTAINER. TIRE AND WHEEL ASSEMBLIES MAY BE SHIPPED HORIZONTALLY (ON SIDEWALLS) WITH THESE PROVISIONS: TIRE AND WHEEL ASSEMBLIES THAT ARE SHIPPED HORIZONTALLY MAY BE EASILY DAMAGED. THIS DAMAGE MAY RESULT WHEN SIDEWALLS CONTACT ANY SHIPPING SURFACE THAT MAY GOUGE, CUT OR PUNCTURE THE TIRE OR DENT THE WHEEL. THE TIRE CAN NOT PROTRUDE PAST THE SHIPPING SURFACE SUCH AS A PALLET. WHEN TIRE AND WHEEL ASSEMBLIES ARE SHIPPED HORIZONTALLY THE SHIPPER MUST ENSURE THE PROTECTION OF ALL PARTS OF THE TIRE AND WHEEL. THIS MAY REQUIRE RELIEF FOR HEAT SHIELDS TO PREVENT CRUSHING. AS THE HEAT SHIELD EXTENDS PAST THE EDGE OF THE WHEEL, THEN THAT HEAT SHIELD NEEDS TO BE PROTECTED AT ALL TIMES. IN ADDITION, WHEN TIRE AND WHEEL ASSEMBLIES ARE SHIPPED HORIZONTALLY, THE TIRE SIDEWALLS MUST BE PROTECTED FROM DAMAGE BY THE USE OF A PROTECTIVE SHEET OF FIBERBOARD BETWEEN THE TIRE AND WHEEL ASSEMBLY AND THE CONTAINER TO ELIMINATE ANY DAMAGE. SHIPPERS MUST ENSURE TIRE AND WHEEL ASSEMBLIES ARE NOT SHIPPED HORIZONTALLY IF THEY WILL BE DAMAGED IN ANY WAY.

2. NO TIRES OVER 40 INCHES MAY BE SHRINK-WRAPPED OR SHIPPED ON A STANDARD 48 X 40 PALLET. WHEN POSSIBLE, FABRICATE CUSTOM PALLETS LARGE ENOUGH TO ACCOMMODATE THE SIZE OF THE WHEEL AND TIRE ASSEMBLIES. TIRES MAY NOT HANG OVER THE EDGE OF A PALLET. THE USE OF A TOP AND BOTTOM SHEET OF FIBERBOARD IS RECOMMENDED. USE OF A TOP SHEET OF FIBERBOARD DURING WRAPPING WILL WATERPROOF THE PALLETIZED TIRE. THE BOTTOM SHEET PROTECTS THE TIRES FROM THE PALLET. PVC (STRETCH WRAP) FILMS SHOULD NOT BE USED, AS THESE LOOSEN AT HIGH TEMPERATURES AND COULD AFFECT THE STABILITY OF THE TIRE. THIS MEETS MILITARY STANDARDS FOR SERVICEABLE AND UNSERVICEABLE METHODS OF PRESERVATION. IT IS RECOMMENDED THAT UPON ARRIVAL AT THEIR DESTINATION, A/C TIRE AND WHEEL ASSEMBLIES BE UNWRAPPED IMMEDIATELY AND STORED VERTICALLY (ON THEIR TREADS). IF THE TIRE AND WHEEL ASSEMBLIES ARE TO BE RESHIPPED WITHIN A SHORT PERIOD OF TIME THEY MAY BE LEFT PALLETIZED.

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**ATTACHMENT III - CONTINUED**

3. SHIPPERS MUST ENSURE SHIPPING SURFACES ARE FREE FROM ANYTHING THAT COULD DAMAGE THE TIRES AND WHEELS. ANY SHARP OR PROTRUDING OBJECTS CAN EASILY DAMAGE TIRES (E.G., NAILS, WOOD SLIVERS, ETC.). PRIOR TO PUTTING MATED TIRE AND WHEEL ASSEMBLIES IN ANY CONTAINER, TRUCK, TRAILER, RAIL CAR, ETC., AND ON PALLETS, ALL SURFACES WILL BE INSPECTED TO INSURE NOTHING WILL PUNCTURE OR DAMAGE THE TIRES AND WHEELS. WHEN SURFACES ARE IN SUCH CONDITION THAT THEY CAN CAUSE DAMAGE TO THE TIRES AND WHEELS THEY MUST BE LINED TO PROTECT THE TIRES AND WHEELS. DO NOT SHIP TIRE AND WHEEL ASSEMBLIES NEXT TO, ON TOP OF, OR UNDER ANY MATERIAL THAT COULD CAUSE DAMAGE TO THE TIRES AND WHEELS.

4. WHEN TIRE AND WHEEL ASSEMBLIES ARE UNIT PACKED IN QUANTITIES OF MORE THAN ONE, THEY SHALL BE SEPARATED BY A FIBERBOARD DIVIDER THAT WILL SEPARATE METAL TO METAL COMPONENTS WITHOUT DAMAGE TO THE TIRES AND WHEELS. ALSO, THE QUANTITIES OF EACH PACK MAY VARY DEPENDENT UPON SIZE OF THE ASSEMBLIES AND MAY NOT MATCH THE DRAWINGS ON THIS SPI.

5. THIS POLICY HAS BEEN CREATED TO ENSURE ALL FORWARD READINESS SPARES PACKAGES (RSP) SUPPORTED LOCATIONS AND FORWARD SUPPLY LOCATIONS (EN-ROUTE), THAT ROUTINELY RECEIVE AND SHIP MISSION ESSENTIAL FORWARD ASSEMBLIES, ARE BEING EXPEDITIOUSLY MOVED TO SUPPORT ALL AIR COMMAND TASKED MISSIONS. ANY QUESTION OR CONCERNS REGARDING THIS POLICY SHOULD BE ADDRESSED TO THE PROPER MANAGING AIR LOGISTICS COMMAND (ALC).

6. **IMPORTANT:** REMEMBER TO REFER TO NOTICE 2 ON PAGE 2 OF THIS SPECIAL PACKAGING INSTRUCTION.

## SPECIAL PACKAGING INSTRUCTION

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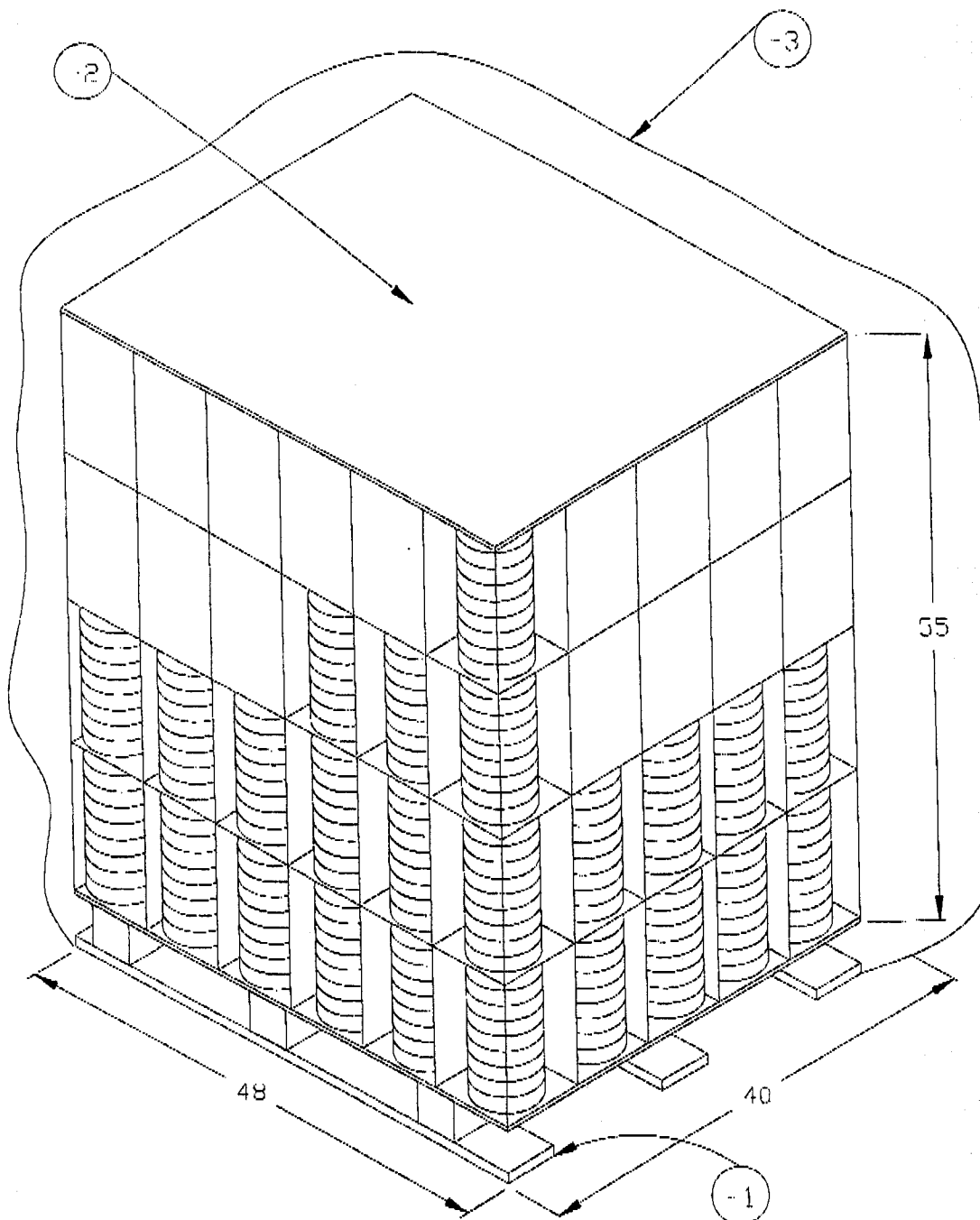


FIGURE 1 - LEVEL B

MAX TOTAL PALLET DIMENSION SHRINK WRAPPED 48 X 40 X 55

## SPECIAL PACKAGING INSTRUCTION

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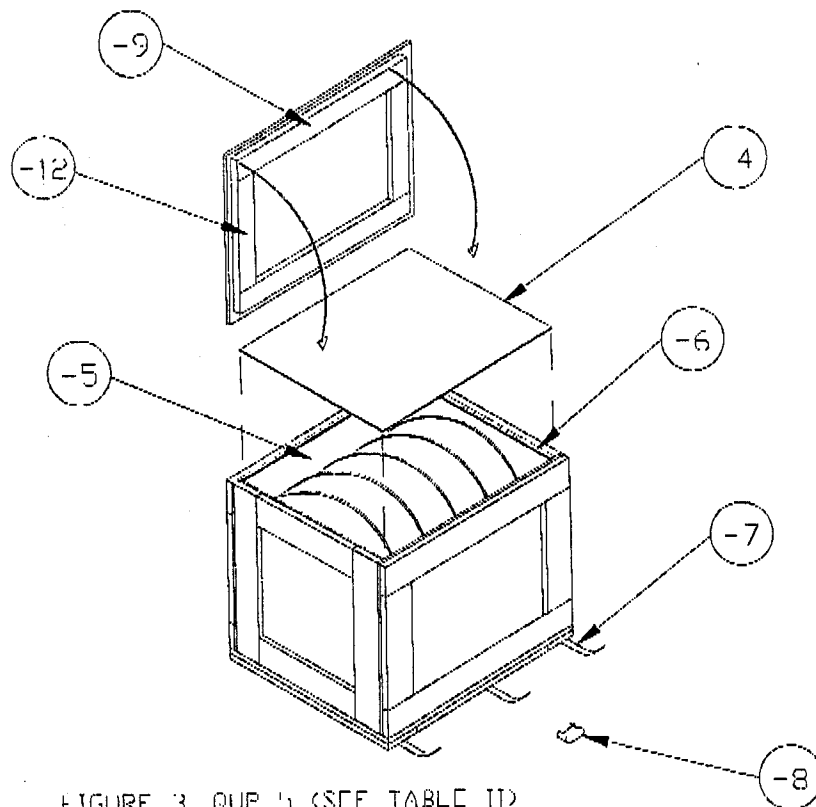


FIGURE 3, QUP 5 (SEE TABLE II)

LEVEL A: ASTM-D16251 (MOD) TY D/S, STY A,  
CLASS 1, GR A, UNNAILED CLOSURE.  
CLOSE BY HANDING (DO NOT NAIL)  
CONTAINERS ARE LINED WITH SW  
FIBERBOARD.

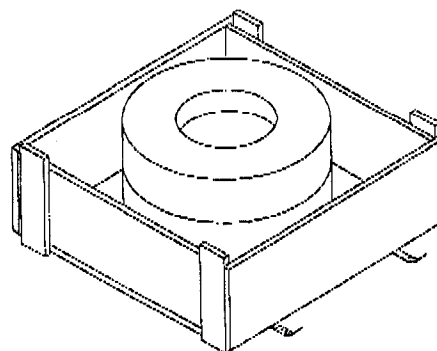


FIGURE 2, QUP 1 (SEE TABLE I)

LEVEL A: PPP-B-G21 CI 2, STY 4, GR A  
CLOSE BY HANDING (DO NOT NAIL)  
CONTAINERS ARE LINED WITH SW  
FIBERBOARD.